wattson
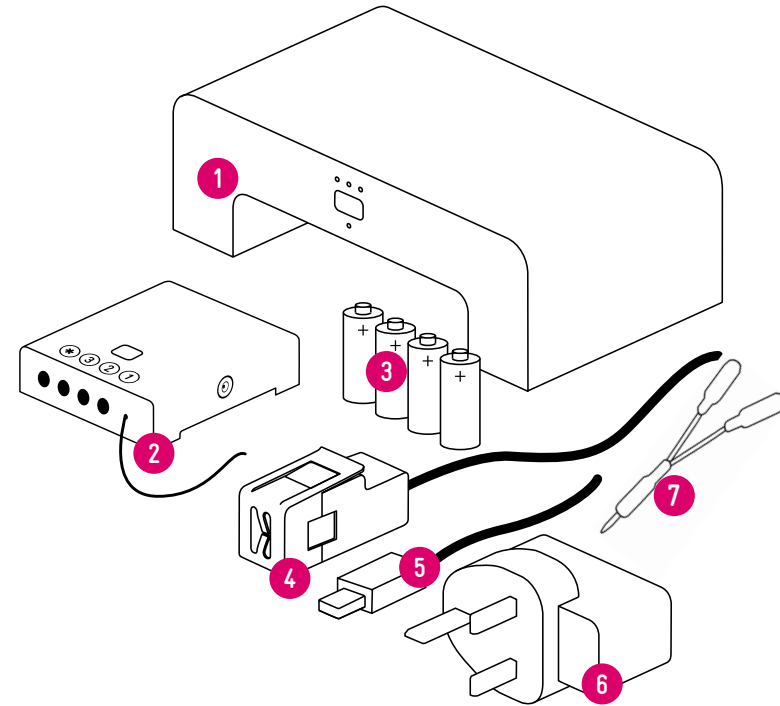
User Guide

What's in the box.

1 Wattson display unit/ Wattson-Anzeige/ **Affichage Wattson/** Wattson-monitor/ **Wattson display.**

2 Transmitter/ Transmitter/ **Émetteur/** Zender/ **Trasmettitore.**

3 Transmitter batteries (optional)/ Batterien für den Transmitter (optional)/ **Piles pour l'émetteur (en option)/** Batterijen voor zender (optioneel)/ **Batterie del trasmettitore (opzionali).**

4 Sensor clip(s)/ Sensorklemme(n)/ **Pince(s) ampèremétrique(s)/** Sensorklem(men)/ **Morsetto/i sensore.**

5 USB lead/ USB-Kabel/ **Câble USB/** USB-kabel/ **Cavo USB.**

6 Power supplies (depending on model)/ Netzstecker (je nach Modell)/ **Alimentations (selon le modèle)/** Voedingsbronnen (afhankelijk van het model)/ **Alimentatore (va seconda del modello).**

7 Y-cable for Easifit/ Easifit-Y-Kabel (optional, je nach Modell)/ **Câble Y pour Easifit (en option, voir le contenu de la boîte selon le modèle)/** Y-kabel voor Easifit (optioneel, zie doos voor representatieve inhoud)/ **Cavo Y per Easifit (opzionale, vedi confezione per il contenuto di ogni modello).**

8 User Guides/ Anleitung(en)/ **Modes d'emploi/** Instructiehandleiding(en)/ **Manuale/i di istruzioni.**

Congratulations on choosing your Wattson energy monitor. Wattson lets you see your electricity usage and generation, giving you the motivation to use less and reduce your electricity bills.

With both numbers and colours, Wattson measures the total amount of electricity being used in your home in real time, and shows this value on an easy-to-read display. When connected to a Solar PV power system it will also show how much energy you are generating.
Wattson can also store up to 28 days of energy which can be downloaded to your computer and viewed using software available from our website: www.wattsonsolar.com.

Extreme care must be taken when working with electrical equipment as touching exposed electrical wires or components may result in electrocution causing death. **In AUSTRALIA Wattson must be installed by a licensed electrician.**

The sensor clips are connected to the transmitter which sends the data wirelessly to the Wattson display. The display is portable, so can be located anywhere in your home (up to 100 meters through air or 30 meters through walls), but should be kept powered for best results.
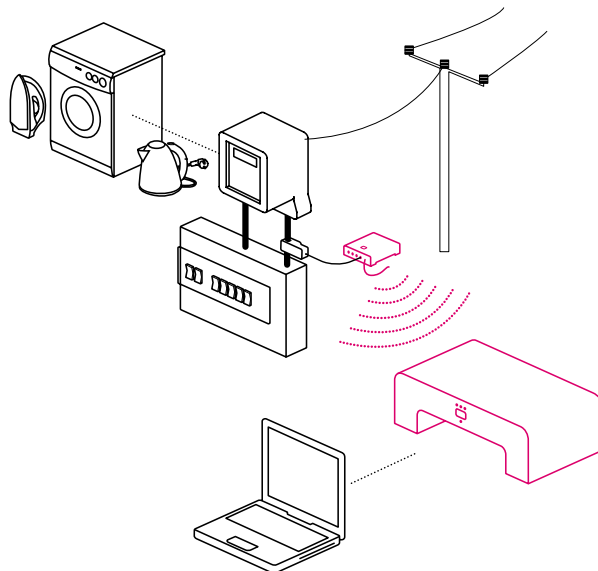
1 / Attach the sensor clips.

The sensor clips must be attached to single-core cables (either live or neutral) in order to measure the electrical power. Simply undo the clip and fit it around the relevant cable. Make sure the clip top is firm and secure in the clip base.

⚡ **Warning:** The cables must be easily accessible for the sensor clip to be fitted - if they are not, please consult a qualified electrician. Further information on www.wattsonsolar.com.
In AUSTRALIA this step must be undertaken by a licensed electrician.

Please see Quickstart Guide for exact placement of sensor clips on cables.

2 / Plug in the sensor lead(s).

There are 4 sockets on the transmitter. Plug the sensor lead(s) measuring electricity usage into the socket(s) marked 1, 2 or 3. (If using the Y-cable, please refer to the Easifit installation guide).
Plug the sensor lead measuring electricity generation into the socket marked ☀.

3 / Fit batteries or attach power.

Either insert the 4 AA batteries provided or connect the DC power supply and the transmitter's LED will begin to flash.
Battery Installation: Make sure the end of the battery marked **+** goes in the end of the tray marked **+**.
Mains Power: Plug power supply unit firmly into socket on transmitter.

DO NOT store unused batteries in transmitter.
For best operation make sure that the white aerial on the transmitter is extended. Metal and dense building materials will shorten the range of transmission and should be avoided where possible.

⚡ **Warning:** The transmitter must not be left hanging from its leads or put strain on your wiring. The transmitter must be protected from water and the elements and must not be used outdoors - this will invalidate your warranty.
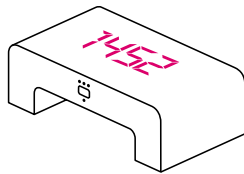
Wattson only has 1 button.

Pressing the button shows which mode Wattson is in, pressing again changes the display mode.

To turn the display unit off, press and hold the button down until GOODBYE starts to scroll. Continuing to hold the button, until GOODBYE has scrolled completely, will enter SETTINGS mode.

Number Modes.

Grid: Shows how much power is being imported from (+ve) or exported to (-ve) the grid for Solar Plus users.
Usage: Shows how much power is being used at this time.
Solar: Shows how much power is being generated for Solar Plus users.
Total Energy Generated: This is a counter showing how much energy has been generated, in Kwh's (U), in Kgs carbon (KG) or money. This counter can be reset to zero by giving the display a gentle shake.
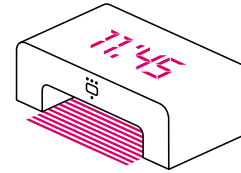
Colour Modes.
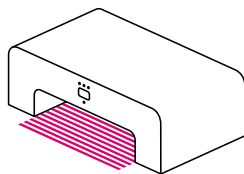
Colours Only: The light changes from blue, low usage through purple, medium to red, high usage. For Solar Plus users the light turns green when energy is being exported to the grid.
Night Mode: This mode reduces the number of lights that are on, reducing the amount of energy the display uses. Wattson continues to receive and store data in this mode.

Clock Mode.

Time is displayed together with power, either in colour or as numbers (in watts) for 3 seconds every minute. You can toggle between colours and number display by tilting Wattson. You will need to connect to Holmes in order to set the time (see Viewing your energy-use history).

Colour display.

The Wattson has a lovely system of coloured lights which can change to reflect the amount of electricity being used at the time.

Below your average - blue
A pure blue colour with a gentle breathing behaviour indicates that the electricity being used is low, maybe just a light or two.

Your average - purple
If the colour is showing purple and is a little more active, then maybe the TV or stereo are on.

Above your average - red
If the light is bright red and it is very active then a lot of electricity is being used - one or more high power appliances may be on, such as kettles, cookers, heaters or tumble dryers.
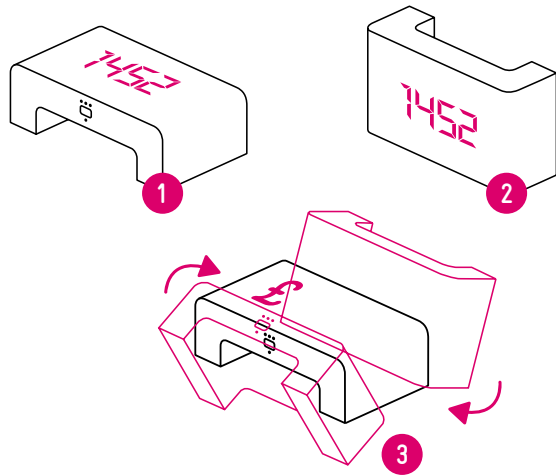
Exporting electricity - green
If the light is green, more energy is being generated than being used.

Wattson has been designed to be positioned on its feet (**1**) or on its front face (**2**). A backward tilt changes units between watts, money and carbon (**3**).

By tilting Wattson the unit of measurement changes from power in watts or KW to cost per year in £/$/€ to amount of carbon used or saved in kg or tonnes.

The cost figure indicates how much the electricity would cost if you left everything in the house exactly as it is for a whole year (or how much you earn for Solar Plus users, if the sun shone 24/7 all year round). The tariffs for energy cost and generated energy payment can be easily updated using Holmes software (available for download at www.wattsonsolar.com).

The carbon figure is the equivalent amount of carbon used or saved by the electricity you use or generate. Carbon emissions calculations have been provided by AMEE, which has used the methodology for greenhouse gas emissions associated with the consumption of grid electricity in the United Kingdom established by the UK Government's Department of Environment, Food and Rural Affairs.

At the time of printing of this manual, the CO2 emissions factor used in wattson is 0.48152 kg/kWh.

Wattson also displays the following messages:

OUT OF RANGE Means there is no communication with the transmitter.

LOW SENSOR BATTERY Means the transmitter batteries are running low. Change 4xAA batteries as soon as possible to avoid missing data collection.

REPLACE SENSOR BATTERY Means that the transmitter batteries have failed.

LOW MAIN BATTERY Means the Wattson display unit battery is low. Note: when the battery gets within 5 minutes of expiring the Wattson will drop into low power mode.

Settings.

By holding the button down for longer than 5 seconds at any time you will enter the SETTINGS mode. You can exit the settings mode at any time by holding the switch down for a short time (less than 3 seconds) to switch the display off.

You can select the individual settings by tilting the display, and choose with a short press of the button.

Set the language: LANG
By tilting the display you can see the different languages available. You can select the language by a short press of the button.

Reset the energy generated counter: ZERO
By tilting the display you reset the energy generated counter. This is an alternative method to the gentle shake when displaying in that mode.

Turn off colours: LEDS
By tilting the display you can switch off/on the coloured lights (LEDS).

Unpair the display from transmitters: UPAIR
This instruction allows all transmitters to be decoupled or unpaired from the display unit. To re-pair a transmitter with the display unit see the trouble shooting guide.

How do I turn Wattson off?
To turn the display unit off, press and hold the button down until it starts to scroll GOODBYE.

How do I reset Wattson?
If you need to reset the display unit for any reason (see Troubleshooting on page 20), insert a pin into the middle air vent hole above the button. Wattson will say HELLO.

How do I re-pair Wattson?
If the display unit has forgotten its transmitter for any reason you will need to re-pair them. Firstly press the transmitter button until the red LED lights continuously. Secondly reset Wattson and it will re-find the transmitter. The message PAIRING SUCCESSFUL will be displayed.

How far does the signal go?
The transmitter uses an FM radio module and can transmit up to 100 meters through air and up to 30 meters through walls, depending on the structure of the building. The range will be shorter in buildings with thicker walls.

How do I charge Wattson?
To charge wattson plug the charger into the DC socket. The power charger supplied will charge the batteries fully in 24 hours. The Wattson does not charge via the USB socket.

How portable is Wattson?
We suggest that you keep wattson powered and use its portability in short bursts.

How is the Wattson display powered?
Wattson has an internal battery pack that will provide power for between 5 - 32 hours depending on what mode it is set to.

How much power does Wattson use?
4 watts in modes with colours and numbers and less than 1 watt in night mode.

What is the transmitter button for?
The button on the transmitter changes the rate at which the transmitter sends new information to the Wattson display unit (the update rate).
The update rate can be set to low, medium or high. The slower the rate, the less often the information will change on your Wattson display but the longer your batteries will last. Using the low update rate could extend the life of your batteries by over 2 months. The light on the transmitter will indicate the update rate by pulsing in time.

To change the rate, briefly press the button. The new rate is indicated by the flashes of the LED
- 3 flashes = high update rate.
- 2 flashes = medium update rate.
- 1 flash = low update rate.

Viewing your energy-use history.

Wattson can store up to 4 weeks of energy-use history which can be uploaded to your computer via the USB lead.

We have developed software (Holmes) for your PC/Mac which will allow you to look at the history of your electricity use over a period of days, weeks or months. Please visit www.wattsonsolar.com to download the software.
The USB lead connects via the socket on Wattson's back face.

Looking after Wattson.

To get the best out of Wattson for years to come, please follow these guidelines:

Clean the plastic parts of Wattson with a damp cloth only.
The holes are designed to keep Wattson cool and should not be blocked or covered. Blocking the vents can cause Wattson to overheat and damage the circuitry.

Please contact us or an authorised repair agent if any repairs are needed, and use only the replacement parts we recommend. For details on returns policy please visit our Knowledge Base: diykyoto.helpserve.com
Please do not attempt to repair the product or modify the circuitry yourself as this will invalidate your warranty.

Troubleshooting.

No lights on your Wattson when you switch it on?

1 / Make sure the display unit is connected to power or its batteries are fully charged. Full battery charge takes around 24 hours but Wattson can still display your energy use whilst it charges. Note that Wattson does not charge via the USB connection.

2 / Reset Wattson manually (as described on page 15)

If Wattson hasn't heard from the transmitter for a little while it will show OUT OF RANGE on its display.

1 / Take Wattson closer to the transmitter.

2 / Check that the transmitter LED is flashing. If not check the power supply or transmitter batteries and replace if necessary.

3 / If the display unit has a flashing dot on the left of the display and the OUT OF RANGE message then you may need to re-pair the display and transmitter (see page 15).

Can't attach the sensor clip to your electricity wire?
If there is not enough space to simply attach the clip to one of the wires please consult a certified electrician. They may be able to fit the clip within your fusebox or distribution unit. DO NOT under any circumstance attempt this yourself.

If Wattson displays 0W

**1 /** Check that you have at least one electrical appliance switched on.

2 / Check that the transmitter LED is flashing (see OUT OF RANGE).

**3 /** Check that the sensors are firmly plugged into the transmitter.

4 / Check that the sensor clips are connected to a single-cored electrical wire. This is the most common cause of zero readings.

If you still are still having trouble, please submit a support ticket at the HelpDesk, diykyoto.helpserve.com.
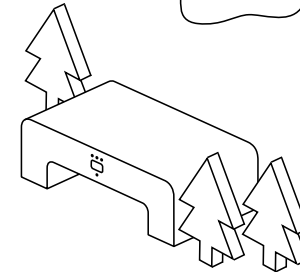
Safety guide.

To avoid power surge disruption, disconnect the cable between the sensor clip and transmitter during any electrical storm.
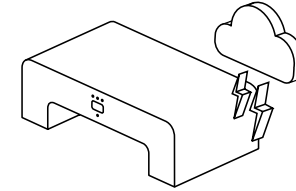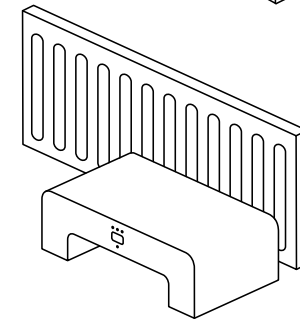
Do not use Wattson in or near water or in high moisture areas such as the bathroom.
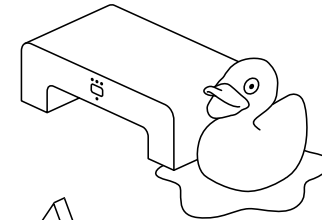
Do not use the sensor clip and transmitter outside. Outdoor usage of the Wattson will invalidate your warranty.

Keep Wattson away from heat sources such as radiators, stoves, heaters and any other heat-generating products.

Do not leave old/used batteries in the transmitter unit for any length of time and remove batteries when using DC power supply as they may leak and cause corrosion.
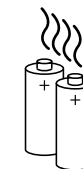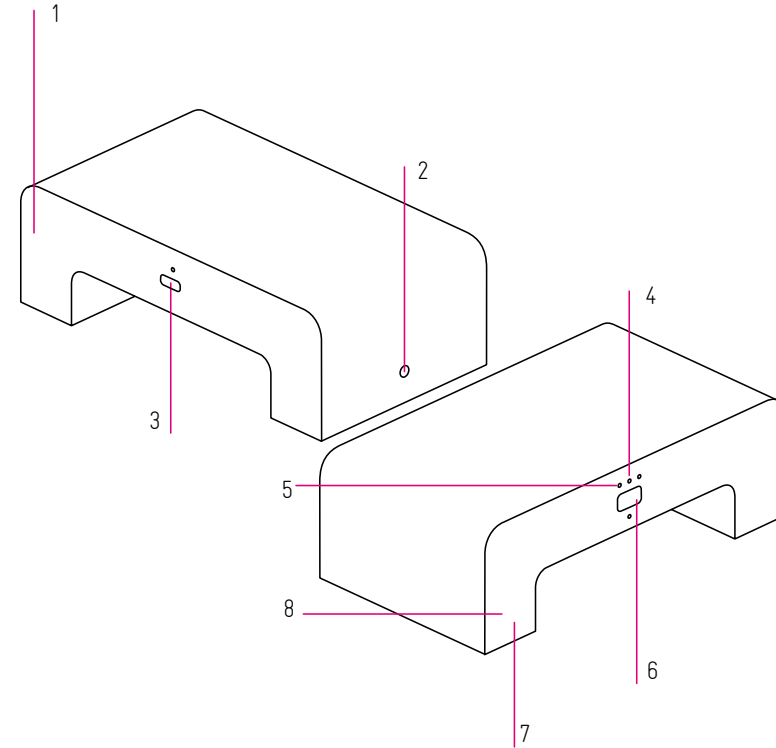
If Wattson is misused or you do not follow these instructions Energeno Ltd can not be held liable for any losses or injury that may result.

Notes.

Wattson display.

1 Front face/ Stirnplatte/ **Face avant/** Voorzijde/ **Parte anteriore**.

2 DC socket/ DC-Buchse/ **Sortie C.C/** Aansluiting gelijkstroom/ **Presa CC**.

3 USB socket/ USB-Anschluss/ **Sortie USB/** USB-aansluitpunt/ **Presa USB**.

4 Reset button/ Reset-knopf/ **Bouton reset/** Knop reset/ **Pulsante reset**.

5 Air vent/ Lüftung/ **Ventilation/** Ventilatie-opening/ **Aerazione**.

6 Button/ Knopf/ **Bouton/** Taste/ **Pulsante**.

7 Feet/ Füße/ **Pieds/** Poten/ **Piedini**.

8 Back face/ Rückenplatte/ **Face arrière/** Achterzijde/ **Parte posteriore**.